Alignment of NFR5 polypeptides

SEQ ID NO 8 with SEQ ID NOs 15, 32, 40, and 48

```
SEQ40          MAVFFVSLTLGAQILYVVLM-FFTC-IEAQSQQTNGTNFSCPSNSPPSCETYVTYISQSP
SEQ48          MAVFFPFLPLHSQILCLVIM-LFSTNIVAQSQQDNRTNFSCPSDSPPSCETYVTYIAQSP
SEQ/8          MAVFF--LTSGSLSLFLALT-LLFTNIAARSEKISGPDFSCPVDSPPSCETYVTYTAQSP
SEQ15          MAIFF--LPSSSHALFLALM-FFVTNISAQPLQLSGTNFSCPVDSPPSCETYVTYFARSP
SEQ32          MSAFF--LPSSSHALFLVLMLFFLTNISAQPLYISETNFTCPVDSPPSCETYVAYRAQSP
               *: **  *.  :  * :.:  ::   * *:.   . .:*:** :*********:* ::**

SEQ40          NFLSLTSVSNIFDTSPLSIARASNLQHEEDKLIPGQVLLIPVTCGCTGNRSFANISYEIN
SEQ48          NFLSLTNISNIFDTSPLSIARASNLEPMDDKLVKDQVLLVPVTCGCTGNRSFANISYEIN
SEQ/8          NLLSLTNISDIFDISPLSIARASNIDAGKDKLVPGQVLLVPVTCGCAGNHSSANTSYQIQ
SEQ15          NFLSLTNISDIFDMSPLSIAKASNIEDEDKKLVEGQVLLIPVTCGCTRNRYFANFTYTIK
SEQ32          NFLSLSNISDIFNLSPLRIAKASNIEAEDKKLIPDQLLLVPVTCGCTKNHSFANITYSIK
               *:***:.:*:**: *** **:***::  ..**: .*:**:******: *:  ** :* *:

SEQ40          QGDSFYFVATTLYQNLTNWHAVMDLNPGLSQFTLPIGIQVVIPLFCKCPSKNQLDRGIKY
SEQ48          QGDSFYFVATTSYENLTNWRAVMDLNPVLSPNKLPIGIQVVFPLFCKCPSKNQLDKEIKY
SEQ/8          LGDSYDFVATTLYENLTNWNIVQASNPGVNP-LLPERVKVVFPLFCRCPSKNQLNKGIQY
SEQ15          LGDNYFIVSTTSYQNLTNYVEMENFNPNLSPNLLPPEIKVVVPLFCKCPSKNQLSKGIKH
SEQ32          QGDNFFILSITSYQNLTNYLEFKNFNPNLSPTLLPLDTKVSVPLFCKCPSKNQLNKGIKY
                **.: ::: * *:****:  .   ** :.   **   :* .****:*******.: *::

SEQ40          LITHVWQPNDNVSFVSNKLGASPQDILSENNYGQNFTAASNLPVLIPVTLLPDLIQSPSD
SEQ48          LITYVWKPGDNVSLVSDKFGASPEDIMSENNYGQNFTAANNLPVLIPVTRLPVLARSPSD
SEQ/8          LITYVWKPNDNVSLVSAKFGASPADILTENRYGQDFTAATNLPILIPVTQLPELTQPSSN
SEQ15          LITYVWQANDNVTRVSSKFGASQVDMFTENNQ--NFTASTNVPILIPVTKLPVIDQPSSN
SEQ32          LITYVWQDNDNVTLVSSKFGASQVEMLAENNH--NFTASTNRSVLIPVTSLPKLDQPSSN
               ***:**: .***: ** *:***  ::::**.   :***:.* .:***** ** : :..*:

SEQ40          GRKHRIG-LPVIIGISLGCTLLVVVSAILLVCVCCLKMKSLNRSASSAETADKLLSGVSG
SEQ48          GRKGGIR-LPVIIGISLGCTLLVLVLAVLLVYVYCLKMKTLNRSASSAETADKLLSGVSG
SEQ/8          GRKSSIH-LLVILGITLGCTLLTAVLTGTLVYVYCRRKKALNRTASSAETADKLLSGVSG
SEQ15          GRKNSTQKPAFIIGISLGCAFFVVVLTLSLVYVYCLKMKRLNRSTSLAETADKLLSGVSG
SEQ32          GRKSSSQNLALIIGISLGSAFFILVLTLSLVYVYCLKMKRLNRSTSSSETADKLLSGVSG
               ***       .*:**:**.:::  * :  ** * * : * ***::* :************

SEQ40          YVSKPTMYETGAILEATMNLSEQCKIGESVYKANIEGKVLAVKRFKED-VTEELKILQKV
SEQ48          YVSKPTMYETDAIMEATMNLSEQCKIGESVYKANIEGKVLAVKRFKED-VTEELKILQKV
SEQ/8          YVSKPNVYEIDEIMEATKDFSDECKVGESVYKANIEGRVVAVKKIKEGGANEELKILQKV
SEQ15          YVSKPTMYEMDAIMEATMNLSENCKIGESVYKANIDGRVLAVKKIKKD-ASEELKILQKV
SEQ32          YVSKPTMYEIDAIMEGTTNLSDNCKIGESVYKANIDGRVLAVKKIKKD-ASEELKILQKV
               *****.:** . *:*.* ::*::**:*********:*:*:***::*:. ..*********

SEQ40          NHGNLVKLMGVSSDNDGNCFVVYEYAENGSLEEWLFAKSCSETSNSRTSLTWCQRISIAV
SEQ48          NHGNLVKLMGVSSDNDGNCFVVYEYAENGSLDEWLFSKSCSDTSNSRASLTWCQRISMAV
SEQ/8          NHGNLVKLMGVSSGYDGNCFLVYEYAENGSLAEWLFSKS-SGTPN---SLTWSQRISIAV
SEQ15          NHGNLVKLMGVSSDNDGNCFLVYEYAENGSLDEWLFSES-SKTSNSVVSLTWSQRITVAV
SEQ32          NHGNLVKLMGVSSDNDGDCFLVYEYAENGSLEEWLFSES-SKTSNSVVSLTWSQRITIAM
               *************. **:**:********** ****::* * *.*   ****.***::*:
```

Alignment of NFR5 polypeptides

SEQ ID NO 8 with SEQ ID NOs 15, 32, 40, and 48

```
SEQ40          DVSMGLQYMHEHAYPRIVHRDITSSNILLDSNFKAKIANFSMARTFTNPMMSKIDVFAFG
SEQ48          DVAMGLQYMHEHAYPRIVHRDITSSNILLDSNFKAKIANFSMARTFTNPMMPKIDVFAFG
SEQ/8          DVAVGLQYMHEHTYPRIIHRDITTSNILLDSNFKAKIANFAMARTSTNPMMPKIDVFAFG
SEQ15          DVAVGLQYMHEHTYPRIIHRDITTSNILLDSNFKAKIANFSMARTSTNSMMPKIDVFAFG
SEQ32          DVAIGLQYMHEHTYPRIIHRDITTSNILLGSNFKAKIANFGMARTSTNSMMPKIDVFAFG
               **::********:****:*****:*****.**********.**** **.**.********

SEQ40          VVLIELLTGRKAMTTKENGEVVMLWKDIWKIFDQEENREERLRKWMDPKLDNYYPIDYAL
SEQ48          VVLIELLTGRKAMTTKENGEVVMLWKDIWKIFDQEENREERLKKWMDPKLESYYPIDYAL
SEQ/8          VLLIELLTGRKAMTTKENGEVVMLWKDMWEIFDIEENREERIRKWMDPNLESFYHIDNAL
SEQ15          VVLIELLTGKKAITTMENGEVVILWKDFWKIFDLEGNREESLRKWMDPKLENFYPIDNAL
SEQ32          VVLIELLTGKKAMTTKENGEVVILWKDFWKIFDLEGNREERLRKWMDPKLESFYPIDNAL
               *:*******:**:** ******:****:*:*** * **** ::*****:*:.:* ** **

SEQ40          SLASLAVNCTADKSLSRPTIAEIVLSLSLLTQPSP-ATLERSLTSSGLDVEATQIVTSIS
SEQ48          SLASLAVNCTADKSLSRPTIAEIVLSLSLLTQPSP-ATLERSLTSSGLDVEATQIVTSIA
SEQ/8          SLASLAVNCTADKSLSRPSMAEIVLSLSFLTQQSSNPTLERSLTSSGLDVEDDAHITSIT
SEQ15          SLASLAVNCTADKSLSRPSIAEIVLCLSLLNQSSSEPMLERSLTS-GLDVEATHVVTSIV
SEQ32          SLASLAVNCTADKSLSRPTIAEIVLCLSLLNQPSSEPMLERSLTS-GLDAEATHVVTSV-
               ******************::*****.**:*.* *. . ******* ***.*    :**:

SEQ40          AR    75% identity
SEQ48          AR    77% identity
SEQ/8          AR    100% identity
SEQ15          --    75% identity
SEQ32          --    74% identity
```

KEY

* = identical residues

: = conserved substitutions

. = semi-conserved substitutions (isosteric)